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Infrastructure Improvements for VA Property and Surrounding Areas

WATER, SEWER, STREETS, AND DRAINAGE

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2005 HURRICANE KATRINA DAMAGE

In August 2005, Hurricane Katrina destroyed most of the water, sewer, streets, and drainage systems located along U.S. Highway 90 and south of the CSX Railroad in Gulfport, Mississippi. Staff members of the City of Gulfport, United States Environmental Protection Agency, and Federal Emergency Management Agency evaluated the remains of the systems and determined the systems repairs which were required. The area, known as Area 3B, which encompasses the VA Property was approved for 100% replacement of the water system and about 25% replacement of the sewer system.

2008 WATER and SEWER MASTER PLAN update

In 2006, the City of Gulfport hired the engineering firms of Brown & Mitchell, Inc. and A. Garner Russell Associates, Inc. to update the existing *2000 Comprehensive Water and Sewer Master Plan* for the areas along U.S. Highway 90 including the VA Property. These firms evaluated the areas based on the zoning allowances and proposed demands which the new development would create on the water and sewer system. This study using hydraulic modeling identified areas of deficiencies, determined the overall capabilities, and made assessments for the future needs of the City. The results and recommendations of the supplement report completed in 2008 were intended to provide water and sewer utilities systems capable of providing customers with reliable service in compliance with regulatory requirements. The Area 3B replacement work was designed using the recommendations from this master plan.

2006 MS GULF REGION WATER and WASTE WATER PLAN

In 2006, the Harrison County Utility Authority, using a Community Development Block Grant, funded water and sewer upgrades needed for future development or to meet current codes along the beachfront. These projects included those identified by the City of Gulfport Master Plan but not funded by either FEMA or the City. Projects are listed below.

W17 - Harrison – South Gulfport Regional Water Supply – Provide water supply system along US 90 corridor – Cost \$3.0 Million

City of Gulfport is experiencing significant high-density residential and commercial re-development along the US 90 corridor in the aftermath of Hurricane Katrina. To sustain these re-development efforts, a new water supply well of approximately 1,000 gallons per minute was constructed in west Gulfport near Railroad Street. Upgrading existing water transmission main sizes to accommodate the increased demand from these high density developments was also completed. These upgraded transmission mains represent the initial phase of a county-wide water transmission backbone along the US 90 corridor to provide water supply for high-density residential and commercial development along the coastline.

S17- Harrison –Gulfport VA Area Wastewater System Improvements – Cost \$2.0 Million

Much of the U.S. 90 corridor experienced massive hurricane damage, including the area surrounding the Veterans Administration Building. This area is projected to experience higher-density development as recovery efforts continue. In order to support this development wastewater infrastructure improvements including a new pump station along Railroad Street and a new transmission main to the existing pump station on 34th Street is being installed.

S18 - Harrison – South Gulfport Regional Transmission System – Cost \$5.6 Million

The U.S. 90 corridor in Gulfport is expected to experience rapid, high density development in the next few years. In order to accommodate development in this area and to provide well-managed wastewater treatment systems, a new regional pump station and transmission main from the area along U.S. 90 in East Gulfport to the existing Gulfport North WWTF is being installed.



FEMA REPAIR PROJECTS

Overview:

The City of Gulfport Department of Engineering, with Yates Construction as Project Managers, was tasked with rebuilding the infrastructure south of the tracks from Lewis Ave. to Debuys Road. This area has been broken up into 6 areas as follows:

- **Area 1: Lewis Ave to Broad Ave. Cost \$13 Million.** 100% replacement of water, sewer and storm drainage systems and all related streets, curbs and sidewalks. New Pump Station on Alston Ave.
- **Area 2: Broad Ave to 30th Ave. Cost \$19 Million.** 100% replacement of water, sewer and storm drainage and all related streets, curbs and sidewalks.
- **Area 3a: 30th Ave to 20th Ave. Cost \$7 Million.** 100% replacement of water and approximately 40% of sewer closest to Hwy 90.
- **Area 3c: 20th Ave to the west side of VA Property. Cost \$15 Million.** 100% replacement of water and approximately 75% of sewer closest to Hwy 90 and related storm drain issues. New Pump Station at Owen Palmer Park.
- **Area 3b: VA property to east to Debuys Road. Cost \$17 Million.** 100% replacement of water and approximately 25% of sewer and related storm drain issues.
- **Area 3d: Jones Park south of Hwy 90. Cost \$5 Million** 100% replacement of water, storm drainage and sewer systems with new pump station.

Southern VA Property Water Supply:

In December 2009, the VA Elevated Water Tank was completely renovated and painted on both the inside and outside. In September of 2009, a new 8" water line was installed with several fire hydrants on the south side of the VA up to the main gate. From there, a new 10" water main was installed that is looped into a 12" and 16" newly installed water grid that is connected from north of the tracks and from the well on South Rail Road. The newly installed 16" runs all eastward to Debuys Road where a new elevated water tank is scheduled to be installed by the Harrison County Utility Authority. The Harrison County Utility Authority has purchased the property for the tank and plans have been designed. Construction on the new tank is expected soon. The new water grid allows multiple loops and adequate water supply for virtually any future development south of the tracks. The property to the west, (Area 3c) currently has a 6" water main on Hwy 90, but will be replaced with an 8" in the summer of 2010. The completion of the Area 3c water grid will loop to the already completed new water grid for the down town business district. Area 3c is the last of the FEMA infrastructures repair projects to go to bid and is expected to advertise in May 2010.

Northern VA Property Water Supply:

The area to the north of the VA is currently under construction with a new 12" water main on North Rail Road to be tied into the VA Elevated Water Tank. This 12" water main (from Texas Ave.) will complete the loop of water completely around the VA with large high capacity water lines. The connection of the 12" also includes a new 8" water line that will serve the North VA site. The 12" is already installed and the "jack and bore" under the rail road tracks for the 12" connection to the South Property will be done in the near future. Upon acquisition of a permit from the CSX Railroad, this connection is expected to be completed in the next 60 to 90 days.

VA Property Sewer Service:

Currently the sewer service for VA flows to a pump station on the property. The eastern portion of Area 3c, (Hewes Ave) to the VA also flows to the VA pump station. The new design for Area 3c will take all of the Area 3c sewer and flow back to the west to Owen Palmer Park and then the sewer will be pumped to the VA Pump Station. The VA Pump station is being replaced and the capacity increased from 4000 gpm to 6100 gpm. That will allow the VA pump station to handle more capacity thus increasing its ability to handle more development. The Area 3c project is going to be advertised in May 2010 with construction to begin in July 2010 and completion in approximately 14 months.



CURRENT CAPACITY of WATER and SEWER SYSTEMS at VA PROPERTY

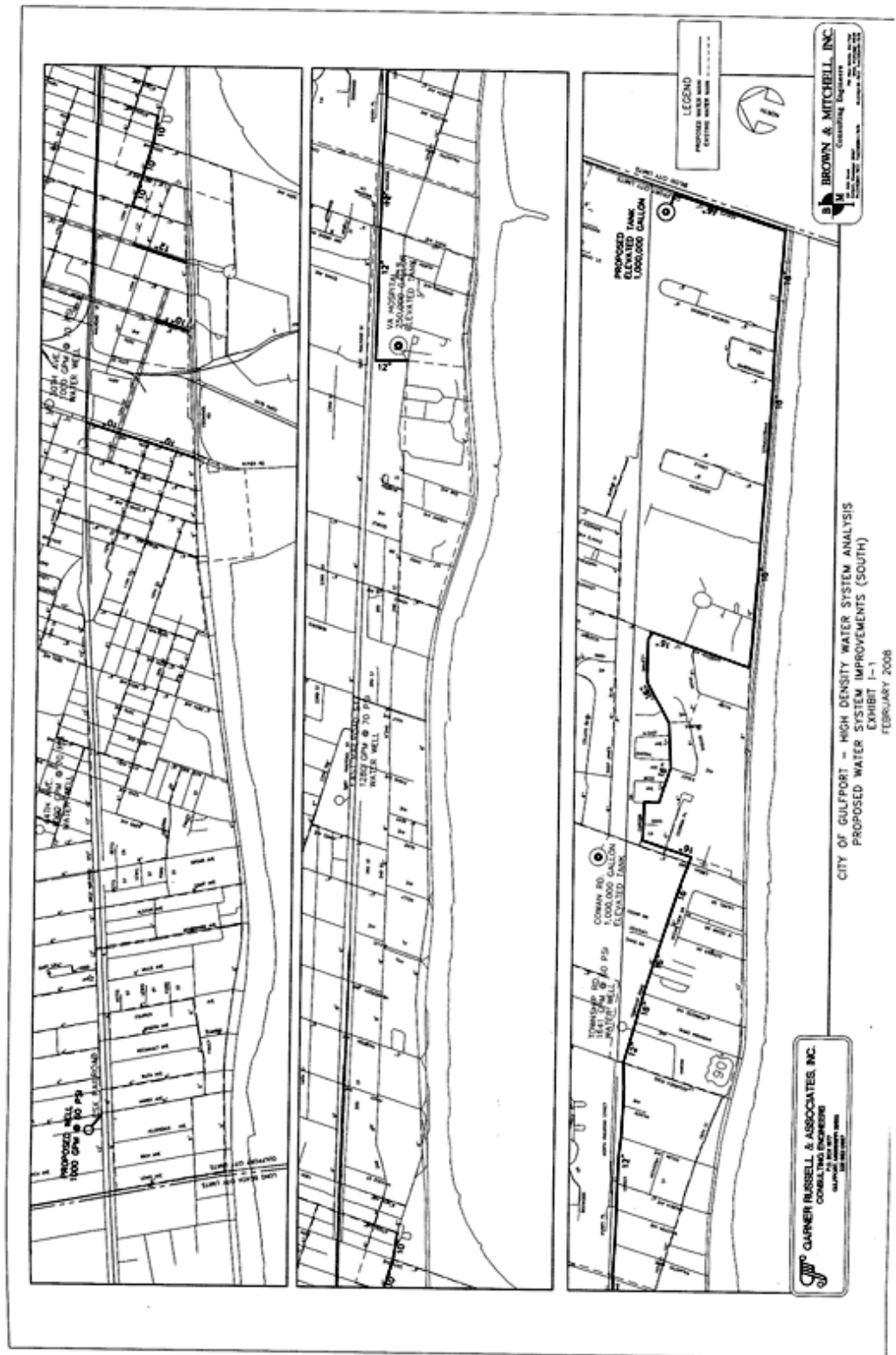
The City of Gulfport, FEMA, and the Harrison County Utility Authority have funded more than \$85 Million in Improvements to the Existing System since Hurricane Katrina.

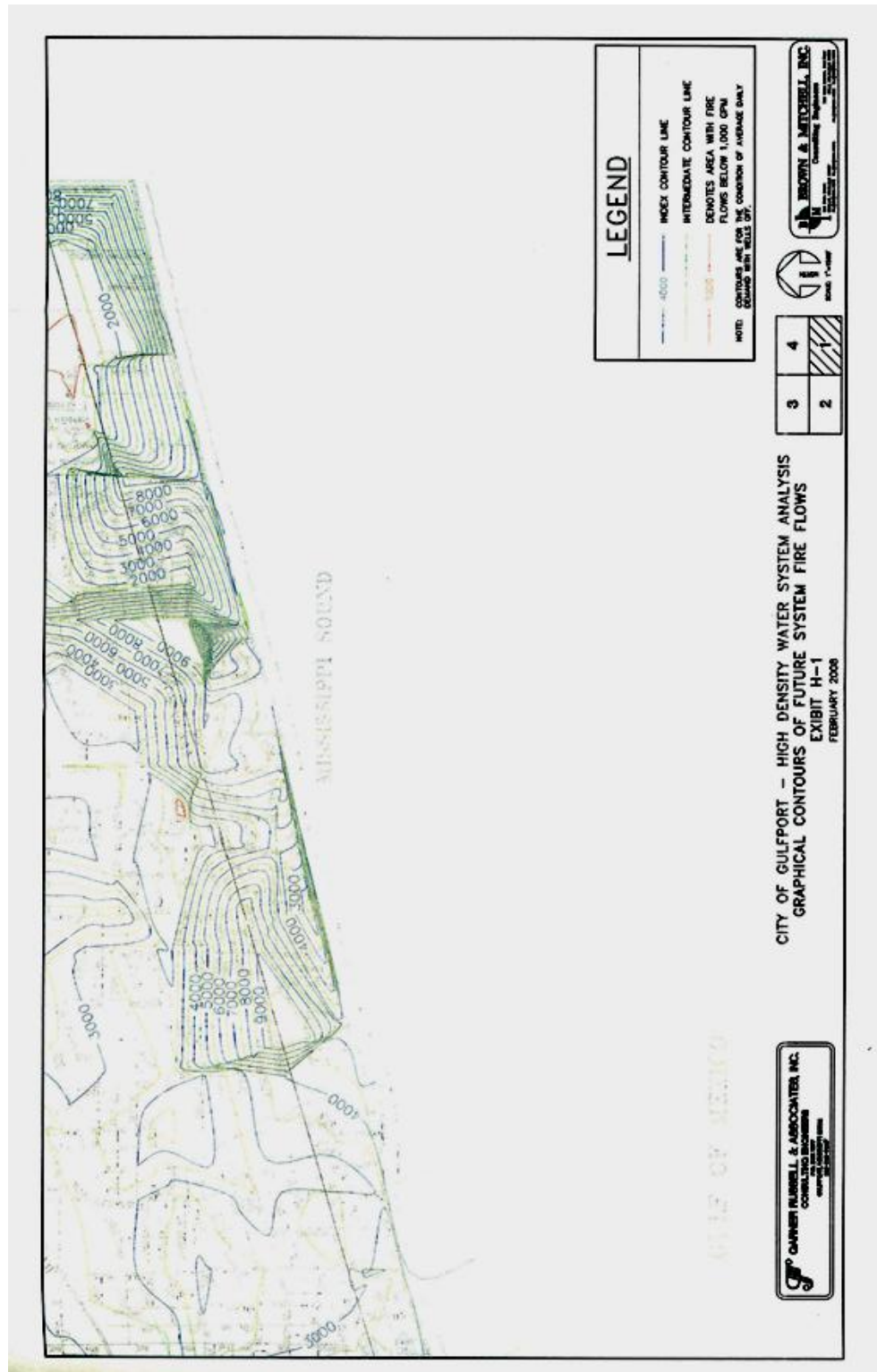
Once all of the infrastructure projects south of the tracks are complete, the area will have the most up to date looped water grid system in all of Gulfport. Re-arrangement of the sewer system and installation of the new Owen Palmer Pump Station will also aid in additional flow. Once infrastructure south of the CSX Railroad (Lewis Ave to Debuys Road) is complete, the entire area will be able to sustain more development than ever before. With a newly engineered infrastructure system, Gulfport is ready!

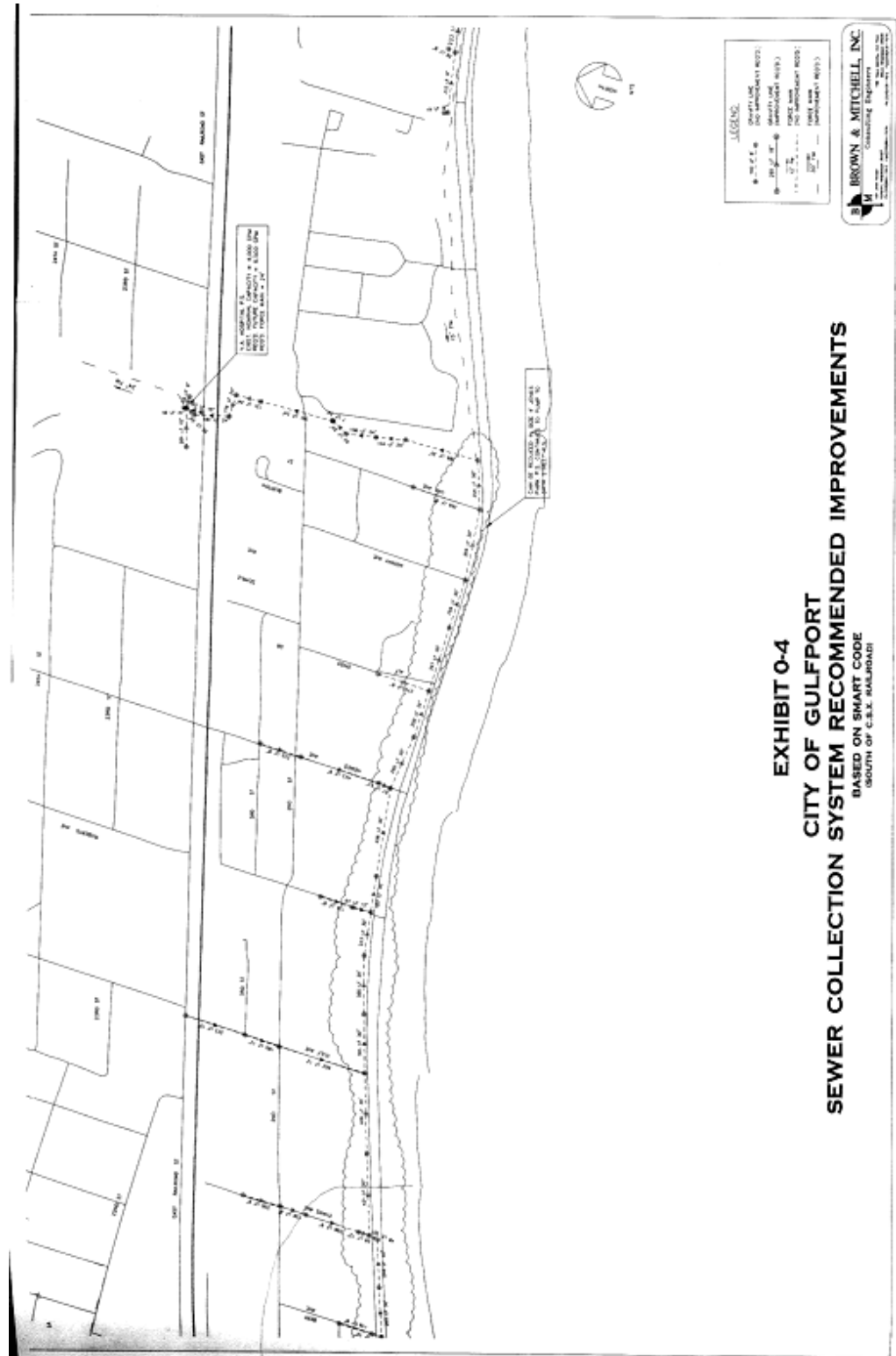
These improvements are shown below, as well as the status of each.

- 1) New 500,000 gallon elevated water tank at Debuys Road
 - a. Construction Start Date August 2010
- 2) Installation of a 16-inch Water Main from Debuys Road to Township Road Well
 - a. Completed October 2009
- 3) Installation of a 12-inch Water Main from Township Well to VA Property Elevated Tank
 - a. Construction Completion Date August 2010
- 4) New 1000 GPM Water Well located on West Railroad Street
 - a. Completed February 2010
- 5) Increases in various water main sizes for minimum 8-inch dead end lines and 6-inch looped
 - a. Completed April 2010
- 6) VA Pump Station capacity increased from 4,000 gpm to 6,100 gpm
 - a. Completion Date December 2010
- 7) VA Pump Station force main increased from 16-inch to 24-inch to accommodate increase in the size of the station
 - a. Completion Date December 2010
- 8) VA Property 250,000 Gallon Elevated Tank Painting and Renovation
 - a. Completed December 2009
- 9) Additional gravity main upsizing to accommodate greater flows projected in this basin
 - a. Completion Date June 2011

PROJECT DESIGNS for WATER and SEWER are SHOWN
on the NEXT 3 PAGES.

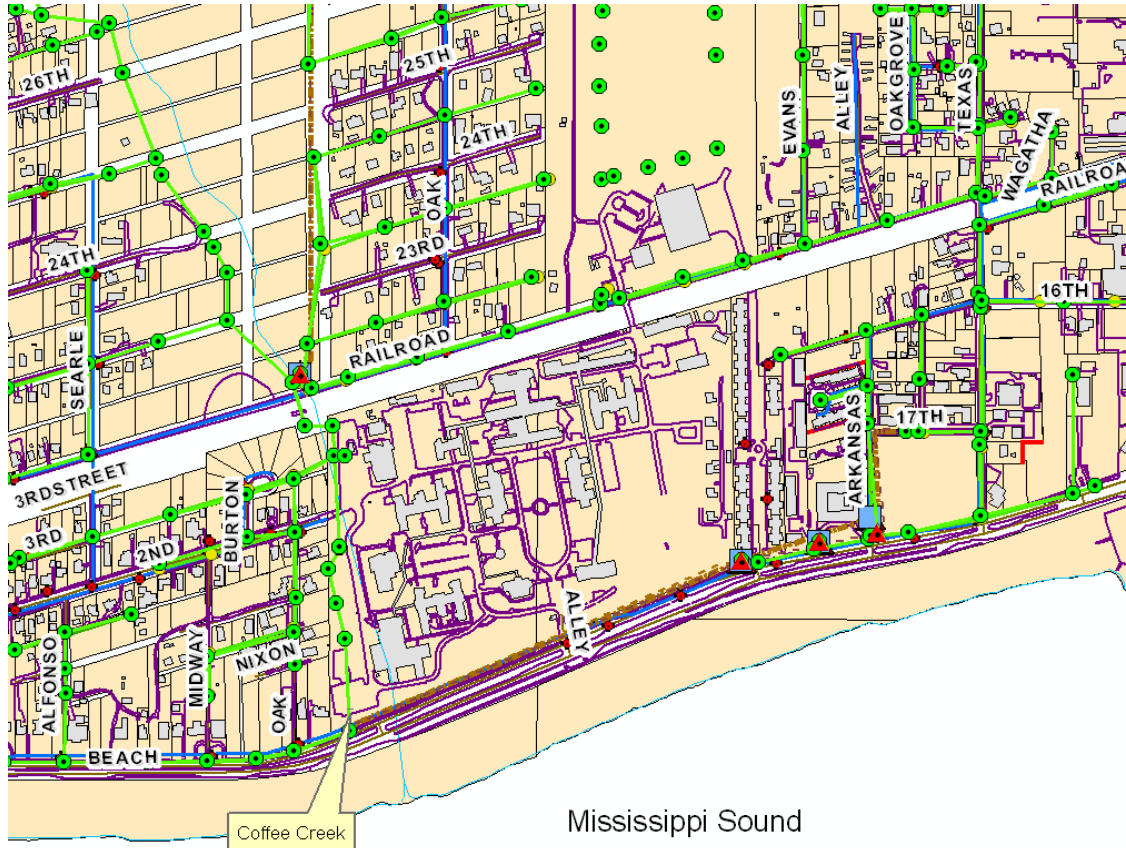






DRAINAGE SYSTEMS

All of the drainage from the VA property flows to the Mississippi Sound Drainage Basin. Coffee Creek which adjoins the property on the west side flows southerly into a large box culvert under U.S. Highway 90 and empties into the Sound.



TRANSPORTATION SYSTEMS

The VA Property is bounded by a major highway on the south, U.S. Highway 90, and a major east/west corridor road, Rail Road Street, on the north. U.S. Highway 90 was recently repaved. These major routes intersect with U.S. Highway 49 and SR 605 which transport traffic north and south from U.S. Interstate 10.

MORE INFORMATION

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